

Serial No.: 10/743,443  
Amendment D dated April 16, 2009  
Response to Office action dated January 22, 2009

### Remarks

Claims 1, 3, 5-12, 14-16, 18, 20-27, 29-33, 35, and 36 are pending and at issue in the present application.

The undersigned thanks Examiners Raj and Sereboff for the courtesies extended during a telephonic interview on April 6, 2009, between the examiners, Thomas Riley, and the undersigned. During the interview, the parties discussed the various rejections of the claims and agreement was reached that the claims could be amended to overcome the patentable subject matter rejection under 35 U.S.C. § 101 and the obviousness rejections under 35 U.S.C. § 103 over the applied references. The following remarks summarize and amplify the substance of the interview.

The present amendment amends claims 1, 16, and 35 as essentially agreed to during the above noted interview to overcome the § 101 and § 103 rejections. No new matter has been added by any of the amendments, support for which can be found either explicitly, implicitly, or inherently, for example, on page 3, lines 3-28, and page 5, line 16 to page 6, line 20, of the application as filed. The MPEP states that the "subject matter of the claim need not be described literally (i.e., using the same terms or *in haec verba*) in order for the disclosure to satisfy the description requirement." MPEP § 2163. Instead, "newly added claim limitations must be supported in the specification through express, implicit, or inherent disclosure." *Id.* At least the sections of the specification recited above provide a sufficient description to provide full support for the amendments to the claims.

The applicants respectfully traverse the rejection of claims 1-15 and 35 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. As stated in *In re Bilski*, a "claimed process is surely patent-eligible under § 101 if: (1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing. 545 F.3d 943, 954 (Fed. Cir 2008) (en banc). Independent claims 1 and 35 recite the step of displaying a representation related to a consequent step on a display screen and have been further amended to recite the step of providing a computer navigation system that implements a multi-step procedure, wherein the computer navigation system performs various steps recited by the claims. Consequently, claims 1-15 and 35

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are tied to at least one particular machine and the rejection under 35 U.S.C. § 101 should be withdrawn.

Further, the applicants respectfully traverse the rejection of claims 1, 3, 5-12, 14-16, 18, 20-27, 29-33, and 35 under 35 U.S.C. § 103(a) as obvious over Van Der Brug U.S. Patent No. 5,954,648 ("Van Der Brug") in view of Malackowski et al. U.S. Publication No. 2003/0093103 ("Malackowski") further in view of DiGioia U.S. Patent No. 6,205,411 ("DiGioia").

The applied references do not disclose or suggest a method of determining a consequent step within a multi-step procedure comprising the steps of identifying a multi-step procedure and providing a computer navigation system that implements the multi-step procedure, wherein the computer navigation system performs the steps of identifying a particular step within the multi-step procedure, identifying a component usable in the multi-step procedure, determining the consequent step within the multi-step procedure based on the identity of the component and the particular step, and, based on the consequent step, automatically jumping to and displaying a representation related to the consequent step on a display unit without direct interaction between a user and the computer navigation system, as recited by claims 1, 3, 5-12, 14, 15, 31-33, and 36.

Further, the applied references do not disclose or suggest a system to determine a consequent step within a multi-step procedure that includes means for identifying a multi-step procedure, a computer navigation system that implements the multi-step procedure, wherein the computer navigation system includes means for identifying a particular step within the multi-step procedure, means for identifying a component usable in the multi-step procedure, means for determining the consequent step within the multi-step procedure based on the identity of the component and the particular step, and means for, based on the consequent step, automatically jumping to and displaying a representation related to the consequent step without direct interaction between a user and the computer navigation system, as recited by claims 16, 18, 20-27, 29, and 30.

Still further, the applied references do not disclose or suggest a method of determining a consequent step within a multi-step procedure comprising the steps identifying a multi-step procedure, providing a computer navigation system that implements the multi-step procedure,

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wherein the computer navigation system performs the steps of identifying a particular step within the multi-step procedure, identifying a component usable in the multi-step procedure, identifying a particular location of the component, determining the consequent step within the multi-step procedure based on the location, the identity of the component, and the particular step, and, based on the consequent step, displaying a representation related to the consequent step on a display unit, as recited by claim 35.

Generally, the applied references disclose surgical navigation systems that can track and identify a component and provide guidance during a surgical procedure. However, the applied references do not contemplate the new synergistic result of determining a consequent step based on a particular step and the identity of a component usable in the procedure and then jumping to and/or displaying a representation related to that determined consequent step.

More particularly, the applicants traverse the use of prior legal decisions on pages 4, 5, 10, and 11 of the Office action to justify the obviousness rejections of the step of and means for "automatically jumping to and . . . without direct interaction between a user and a computer system" recited by claims 1 and 16 because it is not appropriate to rely solely on such legal decisions if "the applicant has demonstrated the criticality of a specific limitation." MPEP § 2144 (III). The criticality of the above limitations at issue is demonstrated in various portions of the specification. For example, the specification discusses that the automatic jumping to a different point within a procedure "will greatly assist the surgeon with their workflow and allow the surgeon to concentrate upon the surgery at hand and minimize the surgeon's interaction with the computer system." Present application, as filed, at page 3, lines 18-28; see also page 1, lines 15-16 (describing prior art systems that require a surgeon to affirmatively advance a screen through each step during a procedure); and page 6, lines 16-20. Therefore, these bases of rejection are improper and should be withdrawn.

Further, the applied references do not disclose or suggest the benefit discussed above but instead require direct user interaction to navigate within a procedure. In fact, DiGioia discloses a navigation system, wherein the "medical practitioner preferably can control the operation of the computer system 20 during the procedure, such as through the use of a foot pedal controller 24

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connected to the computer system 20" and Malackowski discloses a surgical system 20 that includes a controller 70 that causes images of buttons to be presented on a display 71, wherein "[o]perating room personal regulate the operation of the system 20 by selectively depressing these buttons." DiGioia at col. 6, ll. 24-30; Malackowski at ¶ [0060].

Still further, the applicants traverse the assertion on pages 5, 11, and 18 of the Office action that DiGioia discloses a step of or means for identifying a particular step within the multi-step procedure, as recited by claims 1, 16, and 35. More specifically, the Office action avers that DiGioia discloses the limitation at issue at column 8, lines 4-12, and paragraph [0131]. However, column 8, lines 4-12 of DiGioia only discloses identifying implant positions that can be used in conjunction with pre-operative geometric and biomechanical models of a joint to aid in an intra-operative procedure. Further, the identification of paragraph [0131] of DiGioia appears to be a typo regarding which the applicants respectfully request clarification. DiGioia, like the other applied references, merely discloses performing steps without disclosing any need for the step of identifying a particular step.

Therefore, the applied references do not disclose or suggest all of the limitations of the claims at issue and the pending rejections should be withdrawn and the claims passed to issuance.

Additionally, regarding the rejections of claims 3, 18, and 35, the applicants respectfully request clarification regarding such rejections because the Office action contains three different and inconsistent rejections regarding the similarly recited limitation of identifying a particular location of a component and determining a consequent step based on the location, the identity of the component, and the particular step. More specifically, page 6 of the Office action rejects claim 3 over Van De Berg (Van Der Brug?), but then on page 12 of the Office action it is stated that Van Der Brug does not disclose the similar limitation recited by claim 18 and DiGioia paragraph 131 is introduced, which appears to be a typo that corresponds to the Iliff reference from the previous Office action. Further, page 18 of the Office action rejects claim 35, arguing that Malackowski discloses "determining the consequent step within the procedure based on the identity of the component and the particular step," which does not address the full limitation, wherein the determining step is also

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based on the location. The applicants respectfully request clarification of these different and inconsistent rejections.

The applicants also traverse the rejections of claims 3, 18, and 35 because the applied references do not disclose or suggest the step of or means for determining a consequent step based on the location, the identify of the component, and the particular step. For this additional reason, the applicants respectfully request reconsideration and withdrawal of the rejections of claims 3, 18, and 35, and allowance thereof.

For at least the above reasons, applicants respectfully request reconsideration and withdrawal of the pending rejections and allowance of all of the claims at issue. An early indication of allowance is requested.

If there are any issues remaining that can be resolved by telephone, the examiner is invited to call the undersigned.

Deposit Account Authorization

The Commissioner is hereby authorized to charge any deficiency in any amount enclosed or any additional fees which may be required during the pendency of this application under 37 C.F.R. §§ 1.16 or 1.17, except issue fees, to Deposit Account No. 50-1903.

Respectfully submitted,

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